# SOLID EDGE
# VELOCITY SERIES

## *Tutorial:* ***Rear Wheel***

## *Project:* ***Roadroller (Draft)***

cad / cam / pdm / cae CAAP®

Solution Partner PLM SIEMENS

DETAIL B
2:1

SECTION A-A

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|---|---|---|---|
| AMERICAN PROJECTION | SCALE : 1:1 | AUTHOR : Ruben | CAAP<br>Hamersveldseweg 65<br>3833 GL Leusden<br>+31(0)33-4573322<br>www.caap.nl |
| | DIMENSION UNITS : MM | CLASS (DEPARTMENT) : - | |
| | DATE : 22-8-2011 | CHECKED BY : - | |

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| MATERIAL : Steel | TITEL : | NUMBER : | REV: | SIZE: |
| PROJECT: Roadroller | Rear Wheel | 1006 | A | A4 |

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| 1 + | 1. Start **Solid Edge.**<br><br>2. Click on **<u>ISO Draft.</u>**<br><br> | |
| 2 | The template as shown is the Template from CAAP. You can download the Templates at the website of CAAP.<br><br>The previous tutorial explains how to set the Templates&Reports. | |
| 3 | 1. Click the **View Wizard** button. | |

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| 4 | 1. Browse to the folder *Roadroller*.<br>2. Open the document **Roadroller-1006-Rear Wheel-A**.<br>3. Click the **Open** button.<br> <br>***Hint:***<br>*Make sure Part Document (*.par) is selected at Files.* | |
| 5 | 4. Make sure the options are set as shown and click on **Next**.<br> | |
| 6 | 1. Click the **Custom** button.<br> | |

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| 7 | 2. Click the **Custom View** button.<br>3. Make sure the front view is set. Point at the green dots in the Common Views and click to change the views.<br>4. Close the **Common Views**.<br>5. Click the **Close** button.<br> | |
| 8 | 1. Select the other view, as shown.<br>2. Click the **Finish** button.<br> | |
| 9 | 3. Point the red area, as shown and click to place the views. | |

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| 10<br> <br> | 1. Click the **Select** button.<br>2. Click on the view.<br>3. Click on **1:1** at **Scale**. | <br> |
| 11<br> <br><br>+<br> <br> | If **Select** is still active.<br>1. Select and drag the views, as shown. Make sure more views can be placed.<br>2. Click the **View Wizard** button. | <br> |
| 12<br> <br> | 3. Click the **OK** button. | <br> |

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| 13<br> <br> | 4. Make sure the options are set as shown and click on **Next**.<br> <br> | <br> |
| 14<br> <br> | 1. Click the **Custom** button.<br> <br> | <br> |
| 15<br> | 2. Click the **Custom View** button.<br>3. Make sure the isometric view is set. Point at the green dots in the Common Views and click to change the views.<br>4. Close the **Common Views**.<br>5. Click the **Close** button.<br> <br> | <br> |

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| 16 | 1. Point the red area, as shown and click to place the view. | |
| 17 | 1. Click the **Select** button.<br>2. Click on the view.<br>3. Click on **1:1** at **Scale**. | |
| 18 | If **Select** is still active.<br>1. Select and drag the views, as shown. Make sure more views can be placed. | |

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| 19 | 1. Click on the **Zoom Area** button. | |
| 20 | 2. Select the area, as shown. | |
| 21 | 1. Click the **Cutting Plane** button.<br>2. Click on the view, as shown. | |

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| 22 + | 1. Point at the top point and wait until the icon appears before clicking.<br>2. Point at the point below and wait until the icon appears before clicking.<br>3. Click the **Close Cutting Plane** button. | |
| 23 | 1. Make sure the arrows are pointed left and click. | |
| 24 | 1. Click the **Fit** button. | |

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| 25 | 1. Click the **Section** button.<br>2. Point at the arrows of the **Cutting Plane** and click.<br>3. Click to place the **Section**. | |
| 26 | 1. Click the **Zoom Area** button. | |
| 27 | 2. Select the area, as shown. | |

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| 28<br> <br> | 1. Click the **Detail** button.<br>2. Point at the middle of the axle as shown, and click.<br>3. Click to finish the **Detail**. | <br> |
| 29<br> <br> | 1. Click the **Fit** button. | <br> |
| 30<br> <br> | 2. Click to place the **Detail**, as shown. | <br> |

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| 31 | All views are placed in the **drawing**. Now the dimension can be placed. This will be explained at the next steps. | |
| 32 | 1. Click the **Zoom Area** button. | |
| 33 | 2. Select the area, as shown. | |

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| 34 | 1. Click the **Chamfer Dimension** button. | |
| 35 | 2. Click the horizontal line.<br>3. Click the **Chamfer** button.<br>4. Click to place the dimension. | |
| 36 + | 1. Click the **Select** button.<br>2. Click on the dimension.<br>3. Click on **Edit Definition – Prefix**. | |
| 37 | 1. Fill in **(2x)** at Suffix.<br>2. Click the **Apply** button.<br>3. Click the **OK** button. | |

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| 38 | 1. Click the **Fit** button. | |
| 39 | 1. Repeat step 32 & 33 to Zoom. | |
| 40 | 1. Click the **Bolt Hole Circle** button. | |

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| 41 | 2. Click on **Properties**. | |
| 42 | 3. Select the color: **Green**.<br>4. Click the **OK** button. | |
| 43 | 1. Point at the middle of the circle and wait until the icon appears before clicking.<br>2. Point at the middle of the circle above and wait until the icon appears before clicking. | |

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| 44 | 1. Click the **Angle Between** button. | |
| 45 | 1. Click on the verticale line of the **Bolt Hole Circle**.<br>2. Click on the left line of the **Bolt Hole Circle**.<br>3. Click to place the dimension. | |
| 46 | 1. Click the **Select** button.<br>2. Click on the dimension.<br>3. Click on **Edit Definition – Prefix**. | |
| 47 | 1. Make sure there are no value's, as shown.<br>2. Click the **Apply** button.<br>3. Click the **OK** button. | |

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| 48 | 1. Klik op de functie **Distance Between**. | |
| 49 | 2. Select the property: **Horizontal/Vertical**.<br>3. Point at the top point of the circle and wait until the icon appears before clicking.<br>4. Point at the point below of the circle and wait until the icon appears before clicking.<br>5. Click to place the dimension. | |
| 50 | 1. Repeat the steps 46 and 47 to make sure there is no Prefix. | |

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| 51 | 1. Click the **Distance Between** button. | |
| 52 | 2. Select the property: **Distance Between – Tangent**.<br>3. Click on the top point of the **Bolt Hole Circle**.<br>4. Click on the point below of the **Bolt Hole Circle**.<br>5. Click to place the dimension. | |
| 53 | 1. Click the **Select** button.<br>2. Click on the dimension.<br>3. Click on **Edit Definition – Prefix**. | |
| 54 | 1. Fill in **St.C.**<br>2. Click the **Apply** button.<br>3. Click the **OK** button. | |

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| 55 | 1. Click the **Fit** button. | |
| 56 | 2. Repeat steps 29 & 30 to Zoom. | |
| 57 | 1. Click the **Smart Dimension** button.<br>2. Click the left vertical line.<br>3. Click the right vertical line.<br>4. Click to place the dimension. | |

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| 58 | 1. Repeat the steps 46 and 47 to make sure there is no Prefix. | |
| 59 | 1. Click the **Select** button.<br>2. Click on B, and drag it as shown. | |
| 60 | 1. Click the **Smart Dimension** button.<br>2. Click on the horizontal line, as shown.<br>3. Click on the other horizontal line.<br>4. Click to place the dimension. | |

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| 61 | 1. Repeat the steps 46 and 47 to make sure there is no Prefix. | |
| 62 | 1. Click the **Chamfer Dimension** button. | |
| 63 | 1. Click on the horizontal line, as shown<br>2. Click on the **Chamfer**.<br>3. Click to place the dimension. | |

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| 64 + | 4. Click the **Select** button.<br>5. Click to place the dimension.<br>6. Click on **Edit Definition – Prefix**. | |
| 65 | 1. Make sure there are no value's, as shown.<br>2. Click the **Apply** button.<br>3. Click the **OK** button. | |
| 66 | 1. Click the **Fit** button. | |
| 67 | 2. Repeat steps 29 & 30 to Zoom. | |

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| 68 | 1. Click the **Smart Dimension** button. | |
| 69 | 2. Click on the left vertical line.<br>3. Click on the other verticale line, as shown.<br>4. Click to place the dimension. | |
| 70 | If the **Smart Dimension** is still active.<br>1. Click on the left vertical line.<br>2. Click on the other vertical line, as shown.<br>3. Click to place the dimension. | |

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| 71 | 1. Click on the **Thread** line, as shown. Make sure you choose the right one.<br>2. Click to place the dimension. | |
| 72 + | 1. Click the **Select** button.<br>2. Click to place the dimension.<br>3. Click on **Edit Definition – Prefix**. | |
| 73 | 1. Click on the Subfix field.<br>2. Click on the **Thread Size** icon.<br>3. Select **Center**.<br>4. Click the **Apply** button.<br>5. Click the **OK** button. | |
| 74 | 1. Click on **Edit Definition – Dimension Type**.<br>2. Select the type **Blank**. | |

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| 75 | 1. Click the **Fit** button. | |
| 76 | All **drawings** are ready. Now the file can be saved. | |
| 77 | Now we set the File properties.<br>1. Click the **Application Button**.<br>2. Click on **Properties**.<br>3. Click the **File Properties**. | |

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| 78 | 1. Click the **Summary** tab.<br>2. Fill in *Rear Wheel* at Title.<br>3. Go to the **Project** tab and fill in the following properties:<br>Document Number*: 1006*.<br>Revision Number*: A*.<br>Project Name: *Roadroller*.<br>4. Click **OK** to close the screen. | |
| 79 | The File has to be saved in the folder: *Roadroller*.<br>1. Click on the floppy icon.<br>2. Browse to the folder Roadroller.<br>3. Save the document by name *Roadroller-1006-Rear Wheel-A.dft*.<br>4. Close the file.<br><br>***Hint:***<br>*Save all files of one project in the same folder.* | |